



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 10
SEATTLE, WASHINGTON 98101

NOV 01 1988

REPLY TO
ATTN OF:

WD-135

MEMORANDUM

SUBJECT: MPE Sampling Plan

FROM: Grover R. Partee Jr. *GRP*
Environmental Engineer

TO: CD File

A meeting was held at the MPE (Unimar) facility on Lake Union to discuss available information and set some directions for further study. A list of participants is attached (Barry Paulson, Unimar board member, arrived after the list was circulated).

Jim Miller (Geo Engineers) provided a map as required in the decree and stated that the estimate of grit was 5300 cy. If they remove underlying sediments to a depth of 4 feet over the entire area, the total removal will be about 100,000 cy.

Sampling Sites: Miller & Scott Widness (Geo) indicated that, to minimize costs, they would like to limit the number of samples and, where possible, to sample from existing structures.

Chemical Analysis: Jim Farr (Farr, Friedman & Bruya) said they wanted to screen the samples to determine whether the organics (sheen and hydrocarbon odor) noted in earlier sampling East of the docks was an anomaly. The neighbors to the East, according to Paulson, have had a documented problem. Jim Thornton (Ecology), Dave Jamison (DNR) and John Malek agreed that Farr's proposed colorimetric TPH test (detection at 50 ppm) plus PNA at 1 ppm would suffice for screening, but that more accurate testing might be needed if screening detected hydrocarbons. Farr and Miller agreed that in such a case - or if upland disposal were seriously contemplated - they would need to run EC/GCMS tests to determine specific constituents.

Miller asked whether previous samples could be used for any of the testing. Malek stated (and Farr concurred) that any results would be invalidated by the freezing of those samples. Malek also noted that elutriate tests of samples air dried for 1 month or more should also be conducted as such samples often fail EP toxicity even if the wet samples (as previously tested by both Farr and EPA) pass. Farr stated that he proposed anaerobic elutriate tests to support non-significance of leaving sediments in place. Malek said the (aerobic) tests on air dried samples might also support non-removal. Thornton and Malek also requested some testing on interstitial waters.

I pointed out that the cores previously taken were stopped at 1 to 2.5 feet and that, therefore, the underlying sediments were not tested. The new cores (or at least some of them) need to go down 4-6 feet into the "natural" bottom in order to establish the extent of vertical migration of contaminants of concern. Miller, Widness and Farr discussed how such samples might be taken. They had planned to use a gravity driven tube sampler but that might not go deep enough. They have access to a "vibra-core" sampler which could be driven well down into the bottom, but retrieving it would require some considerable force. Ruth Gordon (Unimar) indicated the crane barge could be used if necessary.

Biological Analysis: Wayne Wright (Fish Pro) will be doing bioassays. He had several questions about the EPA protocols for which I referred him to Joe Cummins. He proposed an amphipod test and a test (developed by USFWS in Missouri) with a burrowing fresh water midge.

The bio/benthos testing plan is not as well along as the chemical analysis plan. Wright has been encountering some difficulty getting presumably available data on Lake Union from the city. Richard Koch (Ecology), Thornton, Jamison and Malek suggested several other sources.

Schedule: Miller indicated he could have a preliminary sampling and analysis plan ready within a few weeks and asked whether we wanted to review it. I said we did and also that others unable to attend this meeting (in particular Rob Jones, National Marine Fisheries) had expressed interest. Miller agreed to provide a written plan by November 16. Wright stated that he would do the best he could by that date but all understood that the bio/benthos study plan was liable to still have quite a few gaps. The participating agencies will review the plan (copies will be provided to both EPA and Ecology for further distribution) and will meet with Unimar, Geo, Fish Pro and Farr et. al. on December 5 to go over any "final corrections". If all goes as expected, Miller will distribute a final plan by December 28, and sampling can begin early in January 1989. This will give us sufficient lead time to initiate any remedial actions in the early or mid summer.

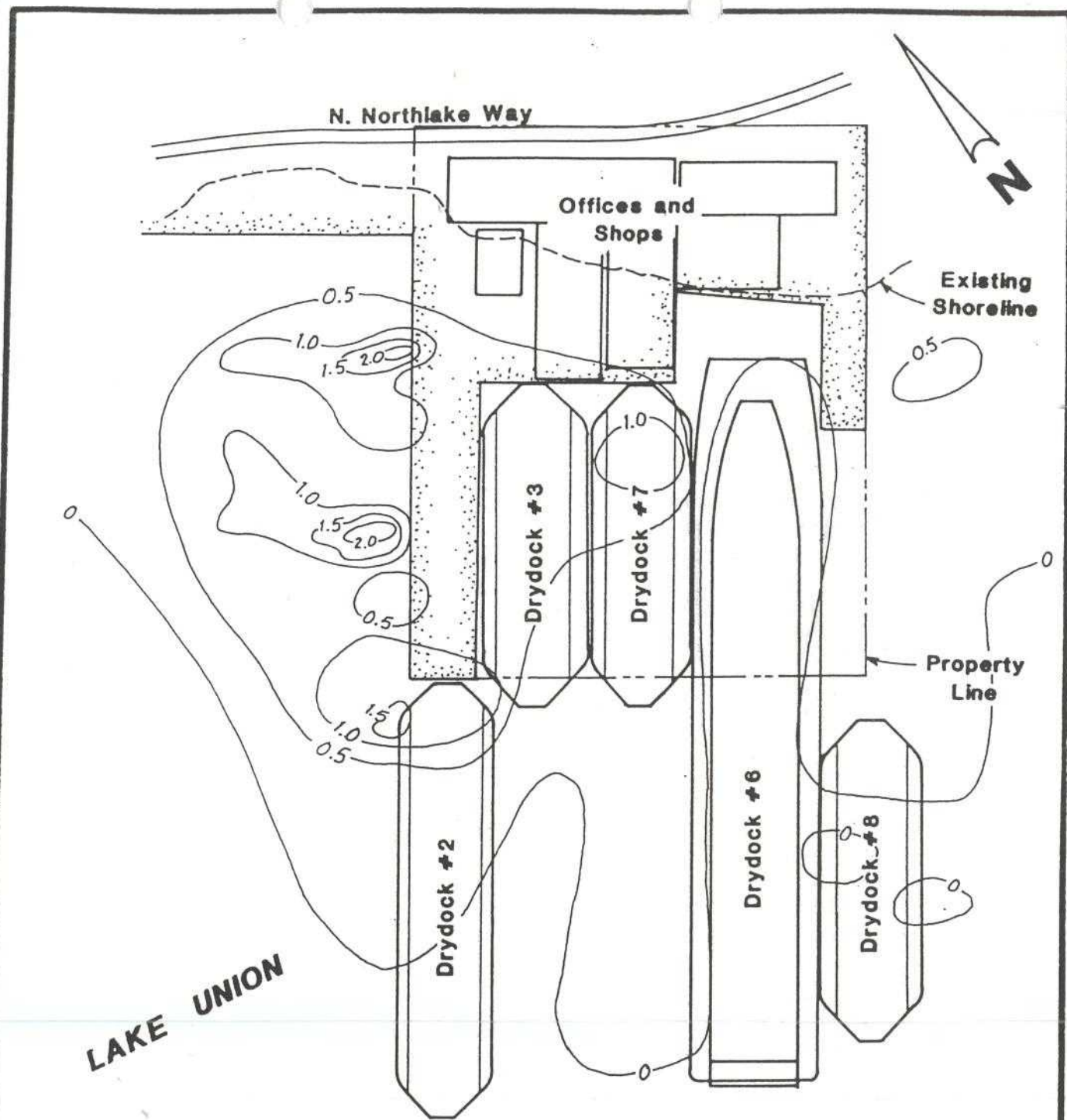
Other Issues: Paulson and Gordon expressed some concern about costs and, specifically, how far outside of the Unimar property the company's responsibility extended. I indicated that my interpretation of the decree was that responsibility was co-extensive with grit (and immediate impacts) and was in no way limited to Unimar's owned or leased property.

Paulson also (again) raised the issue of equitable treatment. I stated that, with respect to the on-going operations, it was our intention, insofar as possible, to deal with Unimar exactly as we would deal with any other shipyard. With respect to the sediments, we are all constrained by the Court but we will try to treat Unimar just as we would treat any other shipyard which had been sued and had agreed to a similar decree. I pointed out that Unimar probably does come in for some additional scrutiny because of the law suits.

Unimar Meeting at MPE Shipyards
October 26, 1988

<u>Name</u>	<u>Organization</u>	<u>Phone</u>
Jim Miller	GeoEngineers	746-5200
Jim Farr	Farr Friedman & Bruya	285-8282
Scott Widness	GeoEngineers	746-5200
Jim Thornton	WDCE	457-6016
Richard Koch	WDCE	867-7037
Gregg M Bishop	Unimar	762-3798
WAYNE S. WRIGHT	FISH PRO, INC	871-2727
Kenneth P. Ferjancic	" " "	" "
Ruth A. Nelson	United Marine	632-1441
Greg Bishop	"	"
Doc Church	"	"
Ch Pawtee Jr	EPA	442-1755
John Malek	EPA	442-1286
David Jamison	DNR	586-2653

1299-02-4 SEW: KKT 10-24-88



EXPLANATION:

0.5 THICKNESS CONTOUR OF
SANDBLASTING MATERIAL

0 100 200
SCALE IN FEET

REFERENCE:

UNTITLED DRAWING PROVIDED BY MARINE POWER & EQUIPMENT, INC.,
DATED 1-12-86.

Geo  Engineers

SITE PLAN

FIGURE 1